

**TrusTec™ Sulfur Calibration Standard**

Version 1.5

Revision Date 2023-09-11

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Product information**

Product Name : TrusTec™ Sulfur Calibration Standard
Material : 1127186, 1101143, 1024585, 1024589, 1024588, 1024587,
1024586

1.2**Relevant identified uses of the substance or mixture and uses advised against**

Relevant Identified Uses : Manufacture of plastics products
Supported

1.3**Details of the supplier of the safety data sheet**

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vincilaan 19
1831 Diegem
Belgium

SDS Requests: (800) 852-5530
Responsible Party: Product Safety Group
Email:sds@cpchem.com

1.4**Emergency telephone:****Health:**

866.442.9628 (North America)
1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

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Mexico CHEMTREC 01-800-681-9531 (24 hours)
 South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
 Argentina: +(54)-1159839431
 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)
 Belgium: 070 245 245 (24 hours/day, 7 days/week)
 Bulgaria: +359 2 9154 233
 Croatia: +3851 2348 342 (24 hours/day, 7 days/week)
 Cyprus: 1401
 Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402
 Denmark: Danish Poison Center (Gifftlinjen): +45 8212 1212
 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Finland: 0800 147 111 09 471 977 (24 hours/day)
 France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)
 Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Greece: (0030) 2107793777 (24 hours/day, 7 days/week)
 Hungary: +36-80-201-199 (24 hours/day, 7 days/week)
 Iceland: 543 2222 (24 hours/day, 7 days/week)
 Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic
 Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371
 67042473. (24 hours.)
 Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Lithuania: +370 (85) 2362052
 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)
 Malta: +356 2395 2000
 The Netherlands: NVIC: +31 (0)88 755 8000
 Norway: 22 59 13 00 (24 hours/day, 7 days/week)
 Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
 Portugal: CIAV phone number: +351 800 250 250
 Romania: +40213183606
 Slovakia: +421 2 5477 4166
 Slovenia: Phone number: 112
 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24
 hours/day, 7 days/week)
 Sweden: 112 – ask for Poisons Information

Responsible Department : Product Safety and Toxicology Group
 E-mail address : SDS@CPChem.com
 Website : www.CPChem.com

SECTION 2: Hazards identification**2.1****Classification of the substance or mixture
REGULATION (EC) No 1272/2008**

Acute toxicity, Category 3	H331: Toxic if inhaled.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.

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Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms

:



Signal Word

: Danger

Hazard Statements

: H315
H319
H331
H336Causes skin irritation.
Causes serious eye irritation.
Toxic if inhaled.
May cause drowsiness or dizziness.

Precautionary Statements

: **Prevention:**

P261

Avoid breathing dust/ fume/ gas/ mist/
vapors/ spray.

P264

Wash skin thoroughly after handling.

P280

Wear protective gloves/ eye protection/ face
protection.**Response:**P304 + P340 + P311 IF INHALED: Remove person to fresh
air and keep comfortable for breathing. Call
a POISON CENTER/ doctor.

P337 + P313

If eye irritation persists: Get medical advice/
attention.**Storage:**

P403 + P233

Store in a well-ventilated place. Keep
container tightly closed.

Hazardous ingredients which must be listed on the label:

- 544-40-1 n-Butyl Sulfide

2.3**Other hazards**Results of PBT and vPvB
assessment: This substance/mixture contains no components considered to
be either persistent, bioaccumulative and toxic (PBT), or very
persistent and very bioaccumulative (vPvB) at levels of 0.1%
or higher.Endocrine disrupting
properties: The substance/mixture does not contain components
considered to have endocrine disrupting properties according
to REACH Article 57(f) or Commission Delegated regulation
(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at
levels of 0.1% or higher.**SECTION 3: Composition/information on ingredients****3.1 - 3.2****Substance or Mixture**

Synonyms

: Dinormal Butyl Sulfide
normal-Butyl Sulfide
5-Thianonane

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DNBS
n-Butyl Sulfide
1,1-Thiobisbutane

Molecular formula : C₈H₁₈S

Hazardous ingredients

Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]	Specific Conc. Limits, M-factors and ATEs
n-Butyl Sulfide	544-40-1 208-870-5	Acute Tox. 3; H331 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H336	95 - 100	

For the full text of the H-Statements mentioned in this Section, see Section 16.

May contain Di-sec-butyl sulfide up to 5 wt%.

SECTION 4: First aid measures**4.1****Description of first-aid measures**

- General advice : Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
- If inhaled : Call a physician or poison control center immediately. If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed**Notes to physician**

Symptoms : No data available.

Risks : No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No data available.

SECTION 5: Firefighting measures

Flash point : 65,56°C (150,01°F)
Method: ASTM D 93

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Autoignition temperature : 216°C (421°F)

5.1**Extinguishing media**Suitable extinguishing media : Carbon dioxide (CO₂).

Unsuitable extinguishing media : High volume water jet.

5.2**Special hazards arising from the substance or mixture**

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3**Advice for firefighters**

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection : Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products : Carbon oxides. Sulfur oxides.

SECTION 6: Accidental release measures**6.1****Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2**Environmental precautions**

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3**Methods and materials for containment and cleaning up**

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4**Reference to other sections**

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Reference to other sections : For personal protection see section 8. For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1****Precautions for safe handling
Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

7.2**Conditions for safe storage, including any incompatibilities****Storage**

Requirements for storage areas and containers : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

German storage class : Combustible Solids

7.3**Specific End Use**

Use : Manufacture of plastics products

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****SK**

Zložky	Podstata	Hodnota	Kontrolné parametre	Poznámka
n-Butyl Mercaptan	SK OEL	NPEL priemerný	0,5 ppm, 1,9 mg/m ³	
	SK OEL	NPEL krátkodobý	1 ppm, 3,8 mg/m ³	

SI

Sestavine	Osnova	Vrednost	Parametri nadzora	Pripomba
n-Butyl Mercaptan	SI OEL	MV	0,5 ppm, 1,9 mg/m ³	
	SI OEL	KTV	1 ppm, 3,8 mg/m ³	

PT

Componentes	Bases	Valor	Parâmetros de controlo	Nota
n-Butyl Mercaptan	PT OEL	VLE-MP	0,5 ppm,	

PL

Składniki	Podstawa	Wartość	Parametry dotyczące kontroli	Uwaga
n-Butyl Mercaptan	PL NDS	NDS	1 mg/m ³	

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	PL NDS	NDSch	2 mg/m3	
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NO

Komponenter	Grunnlag	Verdi	Kontrollparametrer	Nota
n-Butyl Mercaptan	FOR-2011-12-06-1358	GV	0,5 ppm, 1,5 mg/m3	

MK

Съставки	Основа	Стойност	Параметри на контрол	Бележка
n-Butyl Mercaptan	MK OEL	MV	0,5 ppm, 1,9 mg/m3	

IS

Komponenter	Grunnlag	Verdi	Kontrollparametrer	Nota
n-Butyl Mercaptan	IS OEL	TWA	0,5 ppm, 1,5 mg/m3	

IE

Components	Basis	Value	Control parameters	Note
n-Butyl Mercaptan	IE OEL	OELV - 8 hrs (TWA)	0,5 ppm, 1,8 mg/m3	

HR

Sastojci	Temelj	Vrijednost	Nadzorni parametri	Bilješka
n-Butyl Mercaptan	HR OEL	GV1	0,5 ppm, 1,5 mg/m3	IR-D,

IR-D iritacija dišnih organa

GR

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
n-Butyl Mercaptan	GR OEL	TWA	0,5 ppm, 1,8 mg/m3	

FR

Composants	Base	Valeur	Paramètres de contrôle	Note
n-Butyl Mercaptan	FR VLE	VME	0,5 ppm, 1,5 mg/m3	Valeurs limites indicatives,

Valeurs limites Valeurs limites indicatives
indicatives**FI**

Aineosat	Peruste	Arvo	Valvontaa koskevat muuttujat	Huomautus
n-Butyl Mercaptan	FI OEL	HTP-arvot 8h	0,5 ppm, 1,9 mg/m3	
	FI OEL	HTP-arvot 15 min	1,5 ppm, 5,6 mg/m3	

ES

Componentes	Base	Valor	Parámetros de control	Nota
n-Butyl Mercaptan	ES VLA	VLA-ED	0,5 ppm, 1,9 mg/m3	

DK

Komponenter	Basis	Værdi	Kontrolparametre	Note
n-Butyl Mercaptan	DK OEL	GV	0,5 ppm, 1,5 mg/m3	

DE

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
n-Butyl Mercaptan	DE TRGS 900	AGW	0,5 ppm, 1,9 mg/m3	Y,

Y Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden

CZ

Složky	Základ	Hodnota	Kontrolní parametry	Poznámka
n-Butyl Mercaptan	CZ OEL	PEL	1,5 mg/m3	
	CZ OEL	NPK-P	3 mg/m3	

CH

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
n-Butyl Mercaptan	CH SUVA	MAK-Wert	0,5 ppm, 1,9 mg/m3	NIOSH, SSc,
	CH SUVA	KZGW	1 ppm, 3,8 mg/m3	NIOSH, SSc,

NIOSH National Institute for Occupational Safety and Health

SSc Eine Schädigung der Leibesfrucht braucht bei Einhaltung des MAK-Wertes nicht befürchtet zu werden.

BE

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
n-Butyl Mercaptan	BE OEL	TGG 8 hr	0,5 ppm, 1,8 mg/m3	

AT

Inhaltsstoffe	Grundlage	Wert	Zu überwachende	Bemerkung
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			Parameter	
n-Butyl Mercaptan	AT OEL	MAK-TMW	0,5 ppm, 1,9 mg/m3	
	AT OEL	MAK-KZW	0,5 ppm, 1,9 mg/m3	

8.2**Exposure controls
Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

- Respiratory protection : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as: Full-Face Supplied-Air Respirator. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection : Eye wash bottle with pure water.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant protective clothing. Personal protection through wearing a tightly closed chemical protection suit and a self-contained breathing apparatus. Footwear protecting against chemicals.
- Hygiene measures : Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties**9.1****Information on basic physical and chemical properties****Appearance**

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Form : liquid
 Physical state : liquid
 Color : Clear
 Odor : Repulsive

Safety data

Flash point : 65,56°C (150,01°F)
 Method: ASTM D 93

Lower explosion limit : 0,8 %(V)
 Upper explosion limit : 6,8 %(V)

Oxidizing properties : No

Autoignition temperature : 216°C (421°F)

Molecular formula : C8H18S

Molecular weight : 146,32 g/mol

pH : No data available

Freezing point : -75°C (-103°F)

Boiling point/boiling range : 180-191°C (356-376°F)

Vapor pressure : 0,10 PSI
 at 38°C (100°F)

Relative density : 0,84
 at 15,6 °C (60,1 °F)

Density : 841,2 g/l
 at 16°C (60°F)

Water solubility : negligible

Viscosity, dynamic : 1,05 cP
 at 20°C (68°F)

Relative vapor density : 5,07
 (Air = 1.0)

Evaporation rate : 1

Percent volatile : > 99 %

9.2**Other information**

Conductivity : No data available

SECTION 10: Stability and reactivity**10.1**

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Reactivity : Stable under recommended storage conditions.

10.2

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3**Possibility of hazardous reactions**

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

Hazardous reactions: Vapors may form explosive mixture with air.

10.4

Conditions to avoid : Heat, flames and sparks.

10.5

Materials to avoid : Avoid oxidizing agents.

10.6

Hazardous decomposition products : Carbon oxides
Sulfur oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**11.1****Information on toxicological effects****TrusTec™ Sulfur Calibration Standard**

Acute oral toxicity : Presumed Not Toxic

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Acute inhalation toxicity : Presumed Not Toxic

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Acute dermal toxicity : Presumed Not Toxic

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Skin irritation : No skin irritation

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Eye irritation : No eye irritation

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TrusTec™ Sulfur Calibration Standard**Sensitization** : Did not cause sensitization on laboratory animals.**TrusTec™ Sulfur Calibration Standard****Aspiration toxicity** : May be harmful if swallowed and enters airways.
Toxicology Assessment**TrusTec™ Sulfur Calibration Standard****Specific Target Organ Toxicity (Single Exposure)** : Remarks: No adverse effects expected :**TrusTec™ Sulfur Calibration Standard****Specific Target Organ Toxicity (Repeated Exposure)** : Remarks: No adverse effects expected :**TrusTec™ Sulfur Calibration Standard****CMR effects** : Carcinogenicity:
No adverse effects expected
Mutagenicity:
No adverse effects expected
Reproductive toxicity:
No adverse effects expected**11.2****Information on other hazards****TrusTec™ Sulfur Calibration Standard****Further information** : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.**Endocrine disrupting properties** : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.**SECTION 12: Ecological information****12.1****Toxicity****Ecotoxicity effects****Toxicity to fish** : This material is not expected to be harmful to aquatic organisms.**Toxicity to daphnia and other aquatic invertebrates****n-Butyl Sulfide** : 1,71 mg/l
Exposure time: 48 h
Species: Daphnia

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Method: QSAR modeled data

12.2**Persistence and degradability**

Biodegradability

n-Butyl Sulfide : This material is not expected to be readily biodegradable.

12.3**Bioaccumulative potential**

Bioaccumulation

n-Butyl Sulfide : Concentration: 165 mg/l
Method: QSAR modeled data
This material is not expected to bioaccumulate.**12.4****Mobility in soil**

Mobility

n-Butyl Sulfide : Method: Calculation, Mackay Level III Fugacity Model
The product will be dispersed amongst the various environmental compartments (soil/ water/ air).**12.5****Results of PBT and vPvB assessment**

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6**Endocrine disrupting properties**

Endocrine disrupting properties : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7**Other adverse effects**

Additional ecological information : Toxic to aquatic life with long lasting effects.

12.8**Additional Information****Ecotoxicology Assessment**

Short-term (acute) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

Long-term (chronic) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

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SECTION 13: Disposal considerations**13.1****Waste treatment methods**

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

- Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information**14.1 - 14.7****Transport information**

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

NA1993, COMBUSTIBLE LIQUID, N.O.S., (N-BUTYL SULFIDE, DI-SEC-BUTYL SULFIDE), III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-BUTYL SULFIDE), 9, III, (65,56 °C c.c.), MARINE POLLUTANT, (N-BUTYL SULFIDE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN3334, AVIATION REGULATED LIQUID, N.O.S., (N-BUTYL SULFIDE), 9, III

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-BUTYL SULFIDE), 9, III, (-)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

90, UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-BUTYL

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SULFIDE), 9, III

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-BUTYL SULFIDE), 9, III

Maritime transport in bulk according to IMO instruments**SECTION 15: Regulatory information****15.1****Safety, health and environmental regulations/legislation specific for the substance or mixture**
National legislation

Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Water hazard class (Germany) : nwg not water endangering**15.2**

Major Accident Hazard Legislation : 96/82/EC Update:
Toxic
2
Quantity 1: 50 t
Quantity 2: 200 t

: ZEU_SEVES3 Update:
ENVIRONMENTAL HAZARDS
E2
Quantity 1: 200 t
Quantity 2: 500 t

Notification status

Europe REACH : A substance or substances in this product is not registered or notified to be registered. Importation or manufacture of this product is still permitted provided that it does not exceed the REACH minimum threshold quantity of the non-regulated substances.

Switzerland CH INV : On the inventory, or in compliance with the inventory

United States of America (USA) TSCA : On or in compliance with the active portion of the TSCA inventory

Canada DSL : All components of this product are on the Canadian DSL

Australia AIIC : Not in compliance with the inventory

New Zealand NZIoC : On the inventory, or in compliance with the inventory

Japan ENCS : On the inventory, or in compliance with the inventory

Korea KECI : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations.

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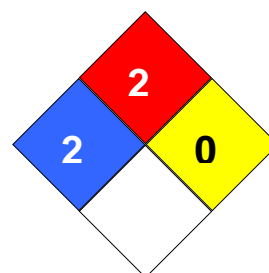
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Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).

Philippines PICCS : On the inventory, or in compliance with the inventory
 Taiwan TCSI : On the inventory, or in compliance with the inventory
 China IECSC : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 2
 Fire Hazard: 2
 Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 42960

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration	PRNT	Presumed Not Toxic

TrusTec™ Sulfur Calibration Standard

Version 1.5

Revision Date 2023-09-11

	Values		
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate

Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.